

UNIT 7

DAY 2

Formulas and Applications

Literal Equation:

an algebraic equation that contains more than one type of variable.

Formula:

a literal equation that states a rule or principle.

1) Solve for a:

$$4a - 2 = 3(2a - 5b) + 4b$$

$$4a - 2 = 6a - 15b + 4b$$

$$-2a = -11b + 2$$

$$a = \frac{-11b + 2}{-2}$$

$$a = \frac{11b - 2}{2}$$

2) Solve for x:

$$ax + bx = c$$

$$\frac{x(a+b)}{(a+b)} = \frac{c}{(a+b)}$$

$$x = \frac{c}{a+b}$$

$$a+b \neq 0$$

$$a \neq -b$$

3) Solve for x:

$$ax - 5 = 3x + 2y$$

$$ax - 3x = 5 + 2y$$

$$x(a - 3) = 5 + 2y$$

$$x = \frac{5 + 2y}{a - 3}$$

$$a \neq 3$$

4) Solve for B:

$$A = \frac{1}{2}(B+b)h$$

$$2A = (B+b)h$$

$$2A = Bh + bh$$

$$2A - bh = Bh$$

$$\frac{2A}{h} \Rightarrow \frac{bh}{h} \quad \frac{2A - bh}{h} = B \quad h \neq 0$$

$$\frac{2A}{h} = B + b$$

$$\left( \frac{2A}{h} - b \right) = B$$

$h \neq 0$

# HOMEWORK

Unit 7 Day 2

Worksheet 51-58 (all), 2-16 (even)